

March 12, 2004

LONGLINE HAUL LOG
EXPERIMENTAL FISHERY

This log is completed for each string of gear set and hauled. It reflects all the physical information relating to a single string fished: weather, water depth, hook depth, bait, target species, set/haul dates, times, position water temperature and calculated set, haul and soak durations. If you are unable to go on deck due to safety concern or illness, indicate this by recording an "X" next to NO=0 in FIELD #8 **HAUL OBSERVED?** And record your reason in the COMMENTS section.

The LONGLINE HAUL LOG will serve as a cover sheet and the INDIVIDUAL ANIMAL LOG/S will follow with all associated catch. If a string is hauled and there is absolutely no catch, "a water haul" indicate this on the LONGLINE HAUL LOG by recording an "X" next to the NO=0 in FIELD #9 **CATCH?**

INSTRUCTIONS

HEADER

1. OBSERVER/TRIP Identifier: Record your assigned three character observer identifier + your three digit sequential deployment number. This will be the unique trip number for all logs and field notes associated with a single trip.
EXAMPLE: **A12005**
2. VESSEL NAME: Record the name of the vessel you are deployed on. Care should be taken to record the correct spelling of the vessel's name. Do not use any punctuation; hyphens, commas or periods in vessel name fields.
EXAMPLE: **MR ADVENTURE, SY KI MAI, MISSYS DREAM**
3. VESSEL NUMBER: Record the six or seven digit U.S. Coast Guard Documentation Number. If the vessel does not have a Coast Guard Number, record the state registration number and include the two letter state abbreviation prefix. This is not the same as the NMFS or state fishing permit number.
EXAMPLE: USCG documentation number - **234567**
State registration number - **FL234567**
4. DATE LANDED: Record the month, day and year the vessel arrives back in port. This may not be same date the catch is unloaded.
EXAMPLE: **01/01/2002**

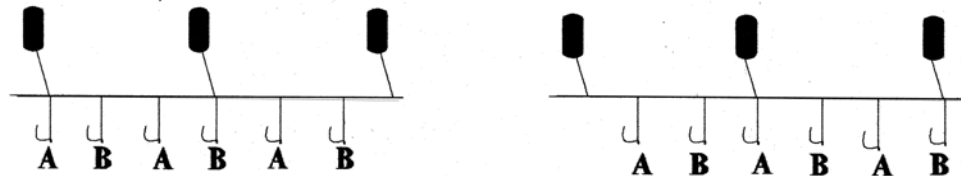
HAUL AND GEAR INFORMATION

5. **HAUL NUMBER:** Record the haul number each time a string is set/hailed. Start with 1 for the first haul and continue sequentially for all hauls made within in a single trip. If a line is cut during the set this should be treated as two separate sets and hauls, each having its own haul log and associated animal logs.
6. **GEAR CODE:** Record the three digit number which describes the gear treatment used for this haul.

2001

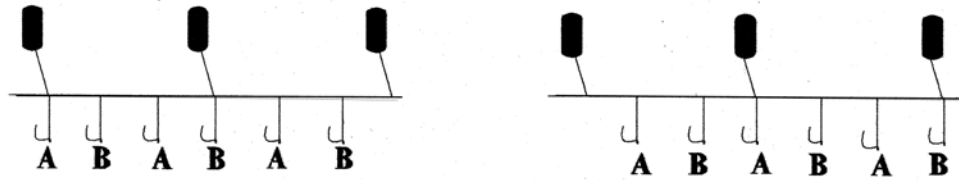
- 001=** Control uses a CASE 1 configuration(a gangion is attached immediately after a float)and natural squid for bait.
- 002=** Treatment uses a CASE 2 configuration(a gangion is attached 20 fathoms from a float)and blue dyed squid for bait
- 003=** Treatment uses a CASE 2 configuration and natural squid For bait

2002



- 004=** Alternate control **A** and treatment **B** with 3 hooks between floats, first hook immediately adjacent to each float and equal distance between hooks two and three and next float.
- 005=** Alternate control **A** and treatment **C** with 3 hooks between floats, first hook immediately adjacent to each float and equal distance between hooks two and three and next float.
- 006=** Alternate treatment **D** and treatment **E** with 3 hooks between floats, first hook immediately adjacent to each float and equal distance between hooks two and three and next float

2003



- 004= Alternate control **A** and treatment **B** with 3 or 5 hooks between floats, first hook immediately adjacent to each float and equal distance between hooks two and three and next float.
- 007= Alternate control **C** and treatment **D** with 3 or 5 hooks between floats, first hook immediately adjacent to each float and equal distance between hooks two and three and next float.
- 008= Alternate control **C** and treatment **E** with 3 or 5 hooks between floats, first hook immediately adjacent to each float and equal distance between hooks two and three and next float.
- 009= Alternate control **F** and treatment **G** with 3 or 5 hooks between floats, first hook immediately adjacent to each float and equal distance between hooks two and three and next float.

2004

- 010= Alternate treatment **H** and **G** with 3 or 5 hooks between floats, hooks equal distance between hooks and next float.
- 011= Alternate treatment **I** and **G** with 3 or 5 hooks between floats, hooks equal distance between hooks and next float.
7. PAGE NUMBER: Record the total number of pages used on this haul. The cover page for each haul will always be page 1 and any associated INDIVIDUAL ANIMAL LOG sheets, will start with page number 2.
8. HAUL OBSERVED: Indicate whether the haul was or was not observed, by placing an "X" next to the appropriate code:
NO= 0 YES=1
- Note: An **observed haul** is defined as one where all of the catch hauled is recorded. An **unobserved haul** is defined as one where complete discard information is **not** collected.
9. CATCH?: Record whether this haul has any associated catch, (recorded on INDIVIDUAL ANIMAL LOG) by placing an "X" next to the appropriate code: NO=0 YES=1

10. INCIDENTAL TAKE?: Indicate whether a marine mammal, sea bird or sea turtle was caught in this haul by placing an "X" next to the appropriate code: NO=0 YES=1 If YES, complete an INCIDENTAL TAKE LOG for all mammals or sea birds and complete a separate Turtle Life History Form for each sea turtle caught.
11. WEATHER: Record the two digit code for the weather at the **beginning** of the haul.
- 01 - Clear
 - 02 - Partly cloudy
 - 03 - Continuous layer of clouds
 - 04 - Drizzle
 - 05 - Continuous Rain
 - 06 - Intermittent Rain/Showers
 - 07 - Thunderstorms with lightning
 - 08 - Rain with fog
 - 09 - Fog or thick haze
 - 10 - Snow or rain and snow mixed
 - 11 - Blowing snow
 - 99 - Other, please describe in field #41 **COMMENTS**
12. WIND SPEED: Record the maximum wind speed, in whole knots, at the **beginning** of the haul.
13. WIND DIRECTION: Record the direction, in compass degrees, of the wind at the **beginning** of the haul. Wind coming from the northeast would be recorded 045. If wind is light or wind direction is difficult to determine, record either "VAR" for variable wind or a dash "-" for undetermined.
14. WAVE HEIGHT: Record the maximum wave height, in whole feet, at the **beginning** of the haul. If the wave is less than six inches, record 0.
15. REVERSE HAUL? Indicate whether this was a reverse haul by placing an "X" next to the appropriate code:
NO= 0 YES=1
A reverse haul is when the last hook set is the first hook hauled.

16. GEAR CONDITION: Indicate the condition of the gear at the completion of the haul back by recording the most appropriate two digit code listed below.

60 = No gear damage with **greater** than 10% hooks lost
61 = No gear damage with **less** than or equal to 10% hooks lost
62 = Less than 50% fouled gear due to weather/oceanic conditions. Gear tangled, spun up or otherwise lowered gear fishability.
63 = More than 50% fouled gear due to weather/oceanic conditions. Gear tangled, spun up or otherwise lowered gear fishability.
66 = Parted off, gear recovered
67 = Parted off, gear not recovered
68 = Gear completely damaged or lost
69 = Split haul (portion of gear having additional soak time)
99 = Other

Please specify **other** gear condition in field #41 **COMMENTS**

17. STRING NUMBER: Record the string number that best describes the configuration fished in this haul. This number relates directly to the LOGLINE GEAR LOG string number.

If there are multiple combinations of gear (more than two gangion lengths or three dropline lengths) or a change in target species, then an additional LOGLINE GEAR LOG will be completed and the appropriate string number entered in field #16. (see field#23)

18. MAINLINE LENGTH: Record the length, to the nearest tenth of a nautical mile, of the main line for this set. Use available electronics or calculate using avg set speed X set duration.
Note: 1 nautical mile = 6080 feet

19. SET SPEED: Record the vessel's speed, to the nearest tenth of a knot, during the setting of gear. This may be an average speed obtained from available electronics or a calculated value from mainline length /set duration.

20. BOTTOM DEPTH RANGE: Record, to the nearest fathom, the minimum and maximum depths over the bottom, which the gear fished for this haul. This can be taken from a chart or from available electronics. **Note: 1 fathom = 6 feet**

21. HOOK DEPTH RANGE: Record, to the nearest fathom, the minimum and maximum depths the hooks fish. This is calculated by adding **dropline length + gangion length + leader length**.
22. TOTAL ADDITIONAL WEIGHT: Record, to the nearest pound, the total weight of additional line weights for this string. This is weight attached to the mainline and is **not** associated with radar reflectors, radio beacons, anchors or gangions/leaders.
23. TARGET SPECIES: Record the primary species being targeted in this haul, using one of the following 3 character abbreviations: SWO, TUN, YFT, BET, SHX, DOL or MIX

This information is obtained from the captain prior to fishing activity but should also be consistent with the following defined target species criteria:

=>50% hooks with light sticks and night soak is a swordfish directed set.

<50% hooks with light sticks and day soak is a tuna directed set.

"MIX" may be used when there is overlap between these two defined criteria or multiple species are being targeted. A change in target species will require an additional Gear Log and string number.

24. SOAK DURATION: Record the amount of time, to the nearest tenth of an hour, that all gear was in the water. defined as end set to begin haul time

ITEMS USED?

25. TYPE: Record whether each type of item listed is used on the gear in this haul, by placing an "X" next to the appropriate code: NO=0 YES=1
26. NUMBER: Record the number of each item used on the gear. All items with an "X" marking YES should have a number value > 0 *Please record a zero for items **not** used.

NUMBER OF HOOKS

27. SET: Record the number of hooks used for this set.
28. LOST: Record the number of hooks lost. This should relate to field #15 **GEAR CONDITION** and may include "bite offs", "cut offs" and missing hooks.
29. TENDED: Record the number of hooks pulled prior to begin haul. A practice called "hotlining", when a vessel runs the line and pulls individual hooks where floats are submerged. This was commonly used in the live bait tuna fleet, Gulf of Mexico *note live bait fishing was disallowed in Sept, 2000.
30. REBAITED: Record the number of hooks pulled, rebaited and put back into the water. This number will be added to the hooks set number to get total hooks in any effort analysis. *note bait number should reflect hooks set + rebaited hooks.

BAIT INFORMATION

31. NUMBER: Record the number of individual baits used. You can account for up to three different baits. *note, record the larger number of bait kind used in bait #1
32. LBS: Record, to the nearest pound, the total weight of bait used. You can account for up to three different baits.
33. KIND: Record the two digit code that identifies the bait used. You can account for up to three different baits.

Mackerel	= 01
Herring	= 02
Squid	= 03
Artificial	= 04
Sardine	= 05
Scad	= 06
Other	= 99

34. TYPE: Record the one digit code that describes the type of bait used. You can account for up to three different baits.

Whole	= 1
Cut	= 2
Live	= 3
Other	= 9

35. CONDITION: Record the one digit code that describes the condition of the bait used. You can account for up to three different baits.

Frozen	= 1
Semi Frozen	= 2
Thawed	= 3
Fresh	= 4
Salted	= 5
Other	= 9

SET/HAUL INFORMATION

36. SET/HAUL BEGIN/END DATES: Record the month, day and year this set began and ended. Record the month, day and year this haul began and ended.
EXAMPLE: 01/01/2002

37. SET/HAUL BEGIN/END TIMES: Record the local time (24 hour clock) this set began and ended. Record the local time this haul began and ended.
EXAMPLE: **0730** (7:30 AM) **1930** (7:30PM)

38. BEARING/LATITUDE: Record latitude in degrees and minutes and include the hemisphere (N or S) when this set began and ended and when this haul began and ended. If you can only get LORAN than record both TD's and LORAN chains. These values will be converted to lat/lon prior to data entry.
EXAMPLE: **29 35 N** or 61500 (7980Z)

39. BEARING/LONGITUDE: Record longitude in degrees and minutes and include the hemisphere (E or W) for when this set began and ended. If you can only get LORAN than record both TD's and LORAN chains. These values will be converted to lat/lon prior to data entry.
EXAMPLE: **78 30 W** or 43900 (7980Y)

40. SET/HAUL BEGIN/END WATER SURFACE TEMPERATURE: Record, to the nearest tenth of a degree Fahrenheit, the sea water

temperature. Record the water temperature for when this set began and ended. You can obtain this from available electronics or from a surface temperature, taken with a digital thermometer (rated to + or - 0.5 degree Fahrenheit)
* note observers assigned to American Vietnamese vessels should request a digital thermometer.

41. SET/HAUL DURATION: Record the amount of time, to the nearest tenth of an hour, it takes to set out all the gear for this set. This is calculated from when the first piece of gear is deployed (**begin set time**) and when the last piece of gear is deployed (**end set time**).

Record the amount of time it takes, to the nearest tenth of an hour, to haul all the gear for this set. This is a calculation from when the first piece of equipment is brought aboard (**begin haul time**) and the last piece of gear is brought aboard (**end haul time**).

*Note time lost searching for gear due to part offs, mechanical repairs or other breaks (>20 minutes) in the normal hauling operations that occur during the haul back. Total lost time is subtracted from the haul duration calculation. Reasons, times and total time are recorded in the COMMENTS section of the Haul Log.

IE FIELD 41: PART OFF 0820-0900 - 0.7 HRS SEARCHING FOR GEAR

42. COMMENTS: Indicate whether additional information concerning this haul was recorded, by placing an "X" next to the appropriate code: N0=0 YES=1. Please reference each comment with its corresponding field number. If more space is required, use the back of the sheet and include "see back" on the front.

Split hauls - Hauls whereby either the mainline is intentionally cut to allow remaining gear to soak longer or more than 6 hours has elapsed between hauling operations of a single string. The portion of gear that received more soak time will require another haul log. Use the next sequential haul number, record the same set date, time, position, temp and duration but record the new begin haul and end haul information. When a split haul occurs, the **mainline length** and **numbers of gear items** on each of the two haul logs involved will need to be recalculated to reflect the two separate retrievals. **The haul with the additional soak time gets a gear condition code of 69.**